

08/324,835


**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/324,835 10/18/94 MIYAZAKI

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EXAMINER

PALADINI, A

ART UNIT PAPER NUMBER

4

 2107  
DATE MAILED:

06/19/95

 This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133
**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.                  |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/> _____  |

**Part II SUMMARY OF ACTION**

- 1.
- ☒
- Claims
- 1
- are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

- 2.
- ☐
- Claims \_\_\_\_\_ have been cancelled.

- 3.
- ☐
- Claims \_\_\_\_\_ are allowed.

- 4.
- ☒
- Claims
- 1
- are rejected.

- 5.
- ☐
- Claims \_\_\_\_\_ are objected to.

- 6.
- ☐
- Claims \_\_\_\_\_ are subject to restriction or election requirement.

- 7.
- ☐
- This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

- 8.
- ☐
- Formal drawings are required in response to this Office action.

- 9.
- ☐
- The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are
- ☐
- acceptable;
- ☐
- not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

- 10.
- ☐
- The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been
- ☐
- approved by the examiner;
- ☐
- disapproved by the examiner (see explanation).

- 11.
- ☐
- The proposed drawing correction, filed \_\_\_\_\_, has been
- ☐
- approved;
- ☐
- disapproved (see explanation).

- 12.
- ☐
- Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has
- ☐
- been received
- ☐
- not been received
- ☐
- been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

- 13.
- ☐
- Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

- 14.
- ☐
- Other

**EXAMINER'S ACTION**

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1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1) and M.P.E.P.

§ 608.01(l). Correction of the following is required:

Only one current source 1e11 is identified in the specification and in the drawings. If it is assumed for the sake of expediency that 1e11 is the first current source, then the specification does not provide an antecedent basis for the "second current source" recited in claim 1.

2. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "second current source" recited in claim 1 must be shown or the feature cancelled from the claim. No new matter should be entered.

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed

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invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claim 1 rejected under 35 U.S.C. § 103 as being unpatentable over Stoll in view of Kopec.

In figure 1 stoll discloses a circuit which controls a solenoid switch 10. When a switching signal is applied at terminal 11, the internal logic of the circuit causes transistor 27 to be turned on and supply the high current needed to close solenoid switch 10. Capacitor 20 starts charging until the output of NAND gate 21 changes from 1 to 0 which turns transistor 27 off and stops the flow of current. Components 21 -25 essentially constitute a multivibrator which then switches transistor 27 on and off at a selected frequency in order to generate a second low current needed to keep the switch 10 closed. This second current is between 1/10 to 1/20 of the initial high current required to close switch 10. The selected value of capacitor 20 sets the predetermined time period from the time the first high current closes the switching solenoid 10 to the time when the second low current drives the switching solenoid 10. Stoll does not disclose two current sources and two circuits to operate these current sources as recited in the claims.

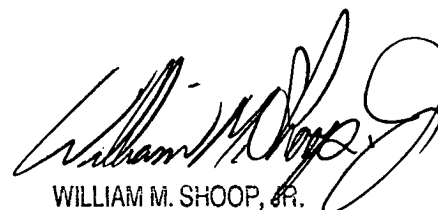
In figure 1 Kopec discloses two circuits with two current sources I1 and I2 which can operate switching element S1. The first circuit is microprocessor 28 which operates the first higher current source I1 via switch SA. When the desired conditions are met, the second circuit, which consists of comparator 22 and

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microprocessor 28, opens switch SA which cuts off high current source I1 and closes switch SB which activates low current source I2 to control switching element S1.

If it were desired to have precise current control for the low and high level currents, it would be obvious to one skilled in the art to add the two current source system developed by Kopec to the switch control system developed by Stoll.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Paladini whose telephone number is (703) 308-2005. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1782.



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SUPERVISORY PATENT EXAMINER  
ART UNIT 217